Rare cancers compose up to 50% of all U.S. diagnoses

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OBJECTIVES

1. To understand the incidence of rare cancers in the United States
2. To identify and discuss clinical trial availability for rare and non-rare cancer patients
3. To highlight the translational gap in targeted therapies for rare and non-rare cancers

INTRODUCTION

Rare cancers are an understudied and deadly public health concern. Estimates for the percentage of cancer diagnoses that carry the "rare" nomenclature vary depending upon the source cited and the statistical definition of what constitutes a rare cancer. Among the dialect of literature focused on rare cancers, the most-repeated metric states that about one quarter of all adult cancers are rare. Given the existing landscape of cancer biology and advances in disease classification and diagnosis, we argue that defined percentage can underestimate the burden of rare cancers, especially from the perspective of neglected patient populations and is a lack of translational research. As such, we have found that rare cancer in total is likely underestimated as a proportion of cancer diagnoses, and that those cancers disproportionately affect historically underserved populations including women and children. In addition, treatment options are disproportionately affect historically underserved populations of rare cancers, especially from the perspective of neglected patient populations and is a lack of translational research.

METHOD & SOURCES

These rates are age-adjusted and based on 2010-2014 cases and deaths. We collected incidence data primarily from ACS and SEER, and cited literary training, and approved therapeutic methods. The term “cancer” was entered into the “Condition or Disease” field, no matter what classification of latest cancer. 3,870 cases, irrespective of whether or not they were identified as being ‘rare.’ We created a database of all rare cancer patients and non-rare cancer patients and analyzed the clinical trials available to rare and non-rare cancer patients.

REFERENCES


CONCLUSIONS & NEXT STEPS

I. Depending on the definition used, up to half of all rare cancer diagnoses in the U.S. can be deemed rare. According to our conservative estimates using the ACS metric, nearly 30% of them are considered rare.

II. Across all clinical trial phases, rare cancers are disproportionately underscored, a particularly salient statistic at the gap between Phase 2 and Phase 3 clinical trials.

III. Even though the rare-cancer incidence could account for up to half of all cancer diagnoses in 2017 (by the NCI metric), 82.23% of patients who have access to fewer FDA-approved targeted therapies are rare cancer patients.